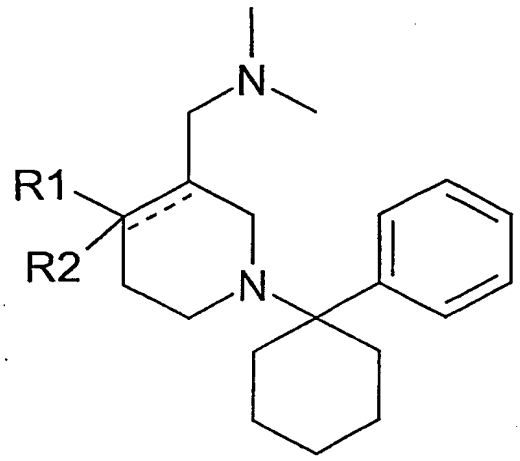
Amendments to the Claims:

The following listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A substituted dimethyl-[1-(1-phenyl-cyclohexyl)-piperidin-3-ylmethyl]-amine compound corresponding to formula I



I

wherein

R1 = H, C_{1-12}-alkyl (branched or unbranched), vinyl, phenyl (mono- or poly-substituted by at least one substitutent independently selected from the group consisting of C_{1-5}-alkyl (branched or unbranched), H, F, Cl, Br, O-methyl, O-ethyl, O-propyl, O-butyl, S-methyl, OH, and CF_3 ~~, or a combination thereof~~),

benzyl (mono- or poly-substituted by at least one substitutent independently selected from the group consisting of C_{1-5}-alkyl (branched or unbranched), H, F, Cl, Br, O-methyl, O-ethyl, O-propyl, O-butyl, S-methyl, OH, and CF_3 ~~, or a combination thereof~~),

phenethyl (mono- or poly-substituted by at least one substitutent independently selected from the group consisting of C_{1-5}-alkyl (branched or unbranched), H, F, Cl, Br, O-methyl, O-ethyl, O-propyl, O-butyl, S-methyl, OH, and CF_3 ~~, or a combination thereof~~), or
naphthyl (mono- or poly-substituted by at least one substitutent independently selected from the group consisting of C_{1-5}-alkyl (branched or unbranched), H, F, Cl, Br, O-methyl, O-ethyl, O-propyl, O-butyl, O-benzyl, S-methyl, OH, and CF_3 ~~, or a combination thereof~~), and

R2 = H, F, Cl, Br, O-methyl, O-ethyl, O-propyl, O-butyl, O-benzyl, S-methyl, OH, CF_3, or R2 represents a bond ~~to the~~ as part of a double bond in the adjacent ring;

or a salt thereof with a physiologically tolerated acid.

2. (Currently amended) A compound according to claim 1, wherein R1 and R2 are bound to a chiral carbon atom, and said compound is present in the form of ~~a pure~~ an isolated enantiomer or ~~a pure~~ an isolated diastereoisomer.

3. (Currently amended) A compound according to claim 1, wherein R1 and R2 are bound to a chiral carbon atom, and said compound is present in the form of a mixture of enantiomers or diastereoisomers.

4. (Original) A compound according to claim 1, wherein said compound is present in the form of a free base.

5. (Original) A compound according to claim 1, wherein R1 is unbranched C_{1-8}-alkyl.

6. (Original) A compound according to claim 1, wherein R1 is vinyl.

7. (Original) A compound according to claim 1, wherein R1 is a phenyl radical substituted by F, Cl, OH or O-methyl.

8. (Original) A compound according to claim 1, wherein R1 is benzyl.

9. (Original) A compound according to claim 1, wherein R1 is phenethyl.

10. (Original) A compound according to claim 1, wherein R2 is OH.

11. (Original) A compound according to claim 1, wherein said compound is:

3-dimethylaminomethyl-4-methyl-1-(1-phenyl-cyclohexyl)-piperidin-4-ol or the corresponding dihydrochloride;

3-dimethylaminomethyl-4-ethyl-1-(1-phenyl-cyclohexyl)-piperidin-4-ol or the corresponding dihydrochloride;

3-dimethylaminomethyl-1-(1-phenyl-cyclohexyl)-4-vinyl-piperidin-4-ol or the corresponding dihydrochloride;

4-butyl-3-dimethylaminomethyl-1-(1-phenyl-cyclohexyl)-piperidin-4-ol or the corresponding dihydrochloride;

3-dimethylaminomethyl-4-octyl-1-(1-phenyl-cyclohexyl)-piperidin-4-ol or the corresponding dihydrochloride;

3-dimethylaminomethyl-4-(3-methoxy-phenyl)-1-(1-phenyl-cyclohexyl)-piperidin-4-ol or the corresponding dihydrochloride;

3-dimethylaminomethyl-4-(2-fluoro-phenyl)-1-(1-phenyl-cyclohexyl)-piperidin-4-ol or the corresponding dihydrochloride;

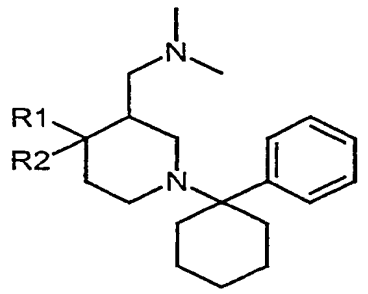
4-(3-chloro-phenyl)-3-dimethylaminomethyl-1-(1-phenyl-cyclohexyl)-piperidin-4-ol or the corresponding dihydrochloride;

4-benzyl-3-dimethylaminomethyl-1-(1-phenyl-cyclohexyl)-piperidin-4-ol or the corresponding dihydrochloride;

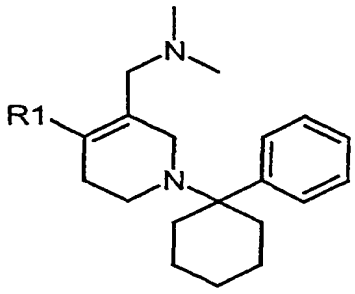
3-dimethylaminomethyl-4-phenethyl-1-(1-phenyl-cyclohexyl)-piperidin-4-ol or the corresponding dihydrochloride; or

3-dimethylaminomethyl-4-(3-hydroxy-phenyl)-1-(1-phenyl-cyclohexyl)-piperidin-4-ol or the corresponding dihydrochloride.

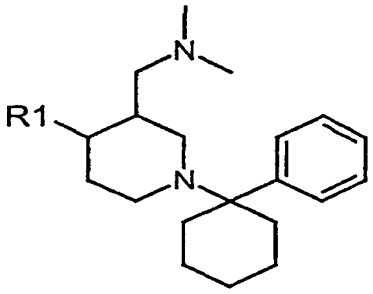
12. (Currently amended) A process for the preparation of a compound of formula XII, XIII, or XIV,



XII



XIII



XIV

wherein

R1 = H, C_{1-12}-alkyl (branched or unbranched), vinyl, phenyl (mono- or poly-substituted by at least one substituent independently selected from the group consisting of C_{1-5}-alkyl (branched or unbranched), H, F, Cl, Br, O-methyl, O-ethyl, O-propyl, O-butyl, S-methyl, OH, and CF_3 ~~, or a combination thereof~~),

benzyl (mono- or poly-substituted by at least one substituent independently selected from the group consisting of C_{1-5}-alkyl (branched or unbranched), H, F, Cl, Br, O-methyl, O-ethyl, O-propyl, O-butyl, S-methyl, OH, and CF_3 ~~, or a combination thereof~~),

phenethyl (mono- or poly-substituted by at least one substituent independently selected from the group consisting of C_{1-5}-alkyl (branched or unbranched), H, F, Cl, Br, O-methyl, O-ethyl, O-propyl, O-butyl, S-methyl, OH, and CF_3 ~~, or a combination thereof~~), or

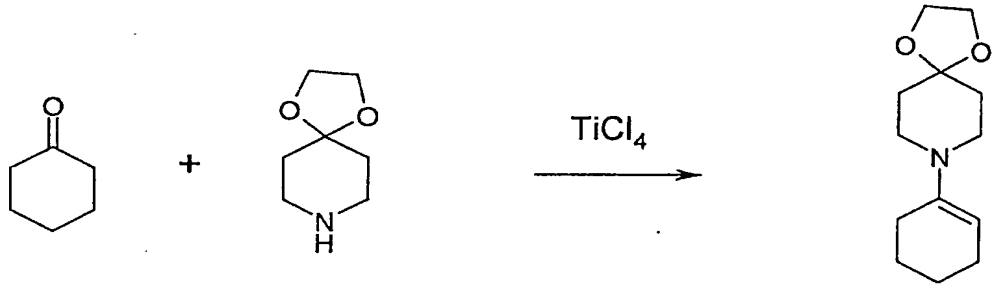
naphthyl (mono- or poly-substituted by at least one substituent independently selected from the group consisting of C_{1-5}-alkyl (branched or unbranched), H, F, Cl, Br, O-methyl, O-ethyl, O-propyl,

O-butyl, O-benzyl, S-methyl, OH, and CF_3 ~~, or a combination thereof~~), and

R2 =H, F, Cl, Br, O-methyl, O-ethyl, O-propyl, O-butyl, O-benzyl, S-methyl, CF_3, or R2 represents a bond ~~to the~~ as part of a double bond in the adjacent ring,

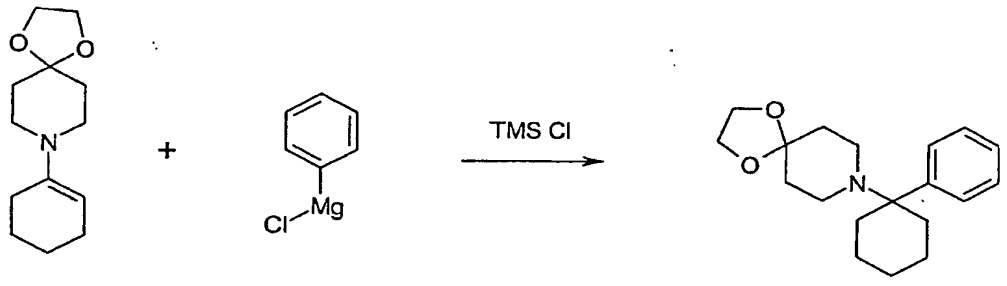
said process comprising the steps of:

reacting a cyclohexanone (formula II) with 1,4-dioxa-8-aza-spiro[4.5]decane (formula III) in the presence of titanium tetrachloride to form an enamine of formula IV;



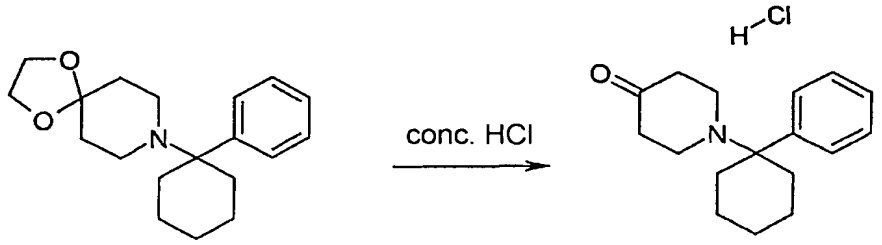
II III IV

reacting the enamine of formula IV with phenylmagnesium chloride (formula V) in the presence of trimethylchlorosilane to form an amine of formula VI;



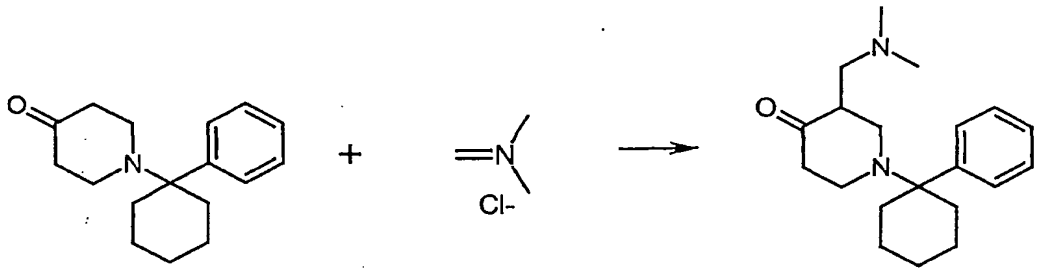
IV V VI

hydrolyzing and precipitating the amine of formula VI to form a hydrochloride of formula VII;



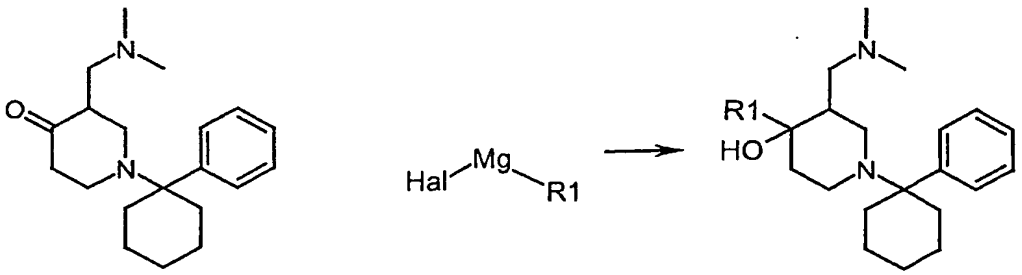
VI VII

reacting the hydrochloride of formula VII with a variant of an Eschenmoser salt according to formula VIII to form a Mannich base of formula IX;



VII VIII IX

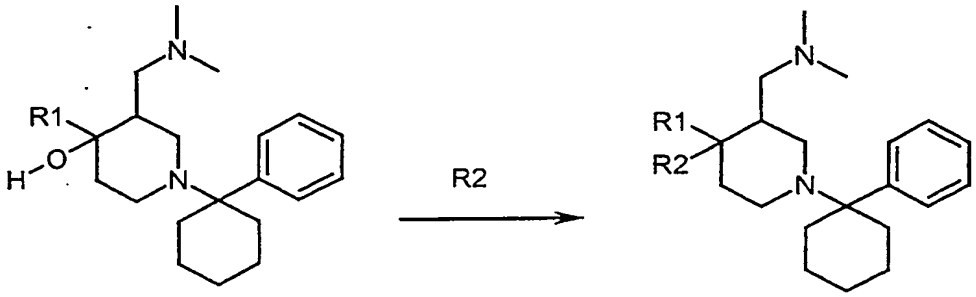
reacting the Mannich base of formula IX with a Grignard reagent of formula X, which has the organic radical R1, to form a compound of formula XI;



IX X XI

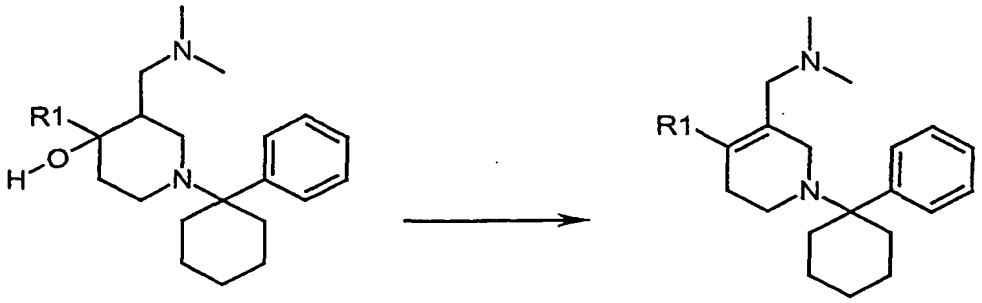
purifying the compounds of formula XI and isolating the compounds of formula XI in the form of salts of physiologically tolerable acids, wherein:

compounds of formula XII are obtained by reacting compounds of formula XI with reagents that replace the OH group in the 4-position of the compounds of formula XI by the radical R2;



XI XII

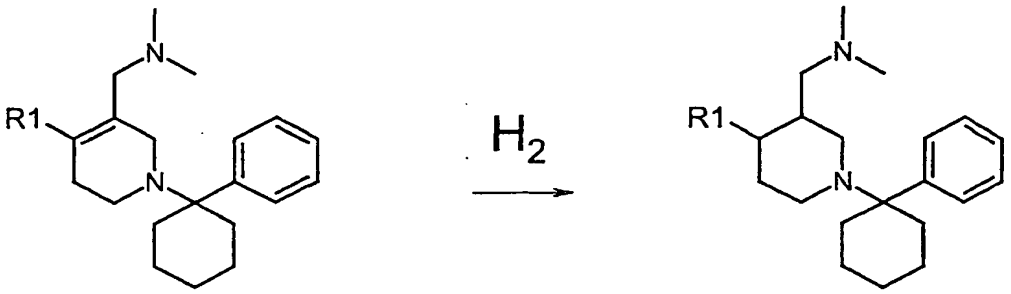
compounds of formula XIII are obtained by dehydrating compounds of formula XI;



XI XIII

or

compounds of formula XIV are obtained by reducing compounds of formula XIII with hydrogen.



XIII XIV

13. (Currently amended) A ~~medicament~~ pharmaceutical composition comprising as an active ingredient a pharmaceutically effective amount of a compound according to claim 1 and a pharmaceutically acceptable carrier or adjuvant.

14. (Currently amended) A ~~medicament~~ pharmaceutical composition according to claim 13 wherein said active ingredient is present as a mixture of the enantiomers of a compound corresponding to formula I ~~according to claim 1~~ containing a chiral carbon atom, wherein the two enantiomers are not present in equimolar amounts.

15. (Currently amended) A ~~medicament~~ pharmaceutical composition according to claim 14, wherein one of the enantiomers has a content of from 5 to 45% in the enantiomeric mixture.

16. (Currently amended) The ~~medicament~~ pharmaceutical composition of claim 13 wherein said compound is present in the form of ~~a pure~~ an isolated enantiomer or ~~a pure~~ an isolated diastereoisomer.

17. (Currently amended) The ~~medicament~~ pharmaceutical composition of claim 13 wherein said compound is present in the form of a mixture of enantiomers or diastereoisomers.

18. (Currently amended) The ~~medicament~~ pharmaceutical composition of claim 13 wherein said compound is present in the form of a free base.

19. (Original) A method of alleviating pain in a mammal, said method comprising administering to said mammal an effective pain alleviating amount of a compound according to claim 1.

20. (Currently amended) The method of claim 19 wherein said compound is administered in the form of ~~a pure~~ an isolated enantiomer or ~~a pure~~ an isolated diastereoisomer.

21. (Original) The method of claim 19 wherein said compound is administered in the form of a mixture of enantiomers or diastereoisomers.

22. (Original) The method of claim 19 wherein said compound is administered in the form of a free base.